Chapter Seven

Services, Facilities and Utilities

The Growth Management Act requires coordinated planning so that the services required by new residents and their homes and businesses are available as growth occurs. Needed services include many that are not provided by King County, such as water supply, local sanitary sewers, fire protection, schools, energy facilities, and telecommunications. King County does provide services such as regional wastewater treatment, regional solid waste management, and local stormwater management. This chapter contains policies that guide service provision.

I. Regional Services

King County government is a regional and local service provider. Types of regional services provided include transit, wastewater treatment, and solid waste management. Local services provided to citizens of unincorporated urban King County and the rural areas include police, building permits, and health and human services. As annexations and incorporations of unincorporated urban areas continue, King County government will focus more on its role as the provider of regional services and protector of the County's rural and resource areas. The following policies direct King County's evolving role as regional service provider.

F-101 **King County, the cities, special purpose districts and/or local service providers shall plan as partners. King County's planning will focus on unclaimed urban unincorporated areas and cities' Potential Annexation Areas.**

F-102 **King County shall work with cities, special purpose districts, other local service providers and citizens to identify and distinguish local and countywide services. Over time, cities will assume primary responsibility for coordinating the provision of local services delivery. The County will assume primary responsibility for coordinating the provision of countywide services, including countywide services that must be delivered within city boundaries. The County will also work with cities, special purpose districts, and other counties to identify regional service and facility needs and develop strategies to provide them.**

F-103 **King County will provide or manage countywide services which include but are not limited to:**

- **a. Transit;**
- **b. Economic Development;**
- **c. Harborview Hospital;**
- **d. Public Health;**
- **e. Regional park, trails and open space systems;**
- **f. Waste water collection and treatment;**
- **g. Solid waste management and recycling;**
- **h. Hazardous waste management;**
- **i. Water resource management;**
- **j. Surface water management and flood warning;**
- **k. Protection and preservation of natural resource lands;**
- **l. Regional Arterial Network (RAN) and freight mobility; and**
- **m. Affordable housing.**

F-104 **King County will, in cooperation with special purpose districts and/or local service providers, continue to plan for and provide public services to the Rural Area, consistent with rural standards and needs.**

F-105 **To support the intent of the Growth Management Act, King County should work with cities and other service providers to establish priority areas for public funding of capital facilities, services and infrastructure.**

II. Facilities & Services

A. Providing a Spectrum of Services

King County and numerous service providers need to coordinate planning and funding activities to ensure that needed facilities and services are provided in the region.

F-201 **All facilities and services should be provided in compliance with provisions and requirements of the Endangered Species Act.**

F-202 **King County should seek to create quality communities by defining the needs and proposing strategies for a full range of public facilities and services, including physical infrastructure and health, human and public safety services. King County should ensure that there is an adequate supply of public facilities necessary to support communities.**

F-203 **King County should work with the cities, special purpose districts and other service providers to define regional and local services and to determine the appropriate providers of those services.**

F-204 **King County shall work with its neighboring counties, the State, Puget Sound Regional Council, special purpose districts, ports and the cities to identify areas of shared need and adequate land supply for public facilities. The County's capital acquisition budget shall reflect the jointly agreed-upon priorities and time schedule.**

F-205 **Public and private community service providers should be encouraged to share or reuse facilities when appropriate, to reduce costs, conserve land and provide convenience and amenity for the public. Joint siting and shared use of facilities should be encouraged for schools, community centers, health facilities, cultural facilities, libraries, swimming pools and other social and recreational facilities.**

B. Urban and Rural Services

Although growth will be directed to Urban areas, it is recognized that Rural areas have facility and service needs also.

F-206 **Public spending to support growth should be directed to the Urban Growth Area and prioritized and coordinated through Capital Facility Plans to comply with the concurrency requirements of the Growth Management Act.**

F-207 **In the Rural Area, services provided by agencies should support a rural level of development and not facilitate urbanization.**

C. Identifying Needs for Facilities and Services

Public facilities and services are vital to protect public health, safety and welfare and to protect and enhance community and environmental quality. Inadequate sewage disposal, for example, could directly threaten public health. Inadequate ground water protection could result in unsafe drinking water and threaten stream flow. Deficiencies in other services, such as police protection or parks, might not raise severe obstacles to any single new development, but over time could cause general threats to public health, safety and welfare and deterioration of community quality.

King County government is responsible for assuring that adequate facilities and services are available or can be made available to support planned growth. This responsibility is carried out by identifying needs for facilities and services based on the planned amount and location of growth. The mechanism for identifying needs is capital improvement programming.

The Growth Management Act requires the County to prepare a capital facility plan which includes an inventory of existing capital facilities owned by public entities, a forecast of the future needs for capital facilities, including the proposed locations and capacities of expanded or new facilities, and a six-year plan that will finance the expanded or new facilities.

The Capital Facility Plan Element for King County is comprised of the following four components:

1. Technical Appendix A is an executive summary of documents containing inventories of facilities and services provided by King County (health and human services and law, safety and justice, transportation) and those provided by other entities (drinking water supply, sanitary sewer collection and treatment, schools, fire protection, libraries, natural gas, telecommunications, and electricity).

2. Technical Appendix A is an executive summary of documents containing the forecast of future needs for capital facilities, including the proposed locations and capacities of expanded or new facilities:

3. Six-year plan that will finance the expanded or new facilities:
   a. Technical Appendix A is an executive summary of the finance plans for facilities and services provided by the County and other entities.
   b. Technical Appendix A references the Transportation Needs Report which includes an analysis of funding capability to judge needs against probable funding resources, and a 20-year financial forecast report based on identified needs.
   c. Current adopted King County Capital Improvement Program for facilities other than transportation.

4. Requirement to reassess land use if funding is unavailable to meet existing and future needs:
   a. Policies of Chapter Seven, Part I Facilities & Services, Sections B – F.
   b. Chapter Nine, Transportation, Section IV.

D. Capital Facility Planning

King County and other service providers are required to prepare six-year capital facility plans that describe needs for the six-year facility and propose funding to meet those needs.

F-208 **The capital facility plans and capital improvement programs prepared by all other agencies which provide services to unincorporated areas of the County should be consistent with the King County Comprehensive Plan.**

F-209 **To reduce overall public costs, noise and disruption to the local area during construction, installation of new or maintenance of existing utility facilities**

should be timed and coordinated with other projects that utilize public right-of-ways and easements, where possible.

F-210 **King County's capital facility plans should identify financing strategies to support its adopted 20-year growth target and land use plan.**

F-211 **King County's capital improvement program shall demonstrate that projected needs for facilities and services can be met within the Urban Growth Area and can be served in compliance with the concurrency requirements of the Growth Management Act or, if that is not possible, King County shall determine where and when deficits may occur and how needed facilities and services might be phased in and or financed to serve such deficit areas. Alternative phasing and financing strategies must be identified and determined to be infeasible prior to triggering a land use and zoning reassessment under Policy F-216.**

F-212 **School districts which choose to have the County collect impact fees for them, and water and sewer utilities that provide their services to unincorporated King County shall prepare capital facility plans consistent with requirements of the Growth Management Act and King County Code.**

F-213 **Provision of an adequate supply of kindergarten through twelfth grade (K-12) public schools and K-12 public school facilities is essential to avoid overcrowding and to enhance the educational opportunities for our children. King County shall adopt regulations which are supportive of the permitting of K-12 public schools and K-12 facilities.**

E. Addressing Service Deficiencies

In the event that needed facilities and services are not available to support either existing development or growth, King County will work with other service providers to address the service deficiency.

F-214 **King County shall initiate a subarea planning process with any service provider that declares, through their capital facilities plan, an inability to accommodate projected service needs inside their service area.**

F-215 **King County and its cities should coordinate planning for health and human service facilities and services. County investments in health and human service facilities should be targeted primarily to the designated Urban Centers and secondarily to other locations in the Urban Growth Area and Rural Towns.**

F-216 **If an area-wide sewer, water, or transportation service deficiency is identified, King County and the applicable service providers shall remedy the deficiency through a joint planning process addressing capital improvement programs and long-term funding strategies. If financing and level of service remedies cannot solve the deficiency, King County shall change zoning to address the problem.**

F. Financing Strategies

King County, cities, and other service providers will work together to address the financing needs of facilities and services.

F-217 **King County shall work with the cities to create a financing partnership for areas of the Urban Growth Area that the cities will annex. This includes**

determining County/regional and city/municipal facilities and services and then committing to a shared financing strategy to build or provide these infrastructure improvements or services.

F-218 **King County should, in cooperation with other jurisdictions, develop funding strategies for governmental infrastructure that take into account economic development goals and consider the costs to, and benefits for, the jurisdictions and the region.**

G. Essential Public Facilities

The region will work cooperatively to site essential public facilities in an equitable manner. Essential public facilities are defined in the Growth Management Act and include large, usually difficult to site facilities such as prisons, landfills, and airports.

F-219 **Proposed new or expansions to existing essential public facilities should be sited consistent with the King County Comprehensive Plan. Listed existing essential public facilities should be preserved and maintained until alternatives or replacements for such facilities can be provided.**

F-220 **King County and neighboring counties, if advantageous to both, should share essential public facilities to increase efficiency of operation. Efficiency of operation should take into account the overall value of the essential public facility to the region and the County and the extent to which, if properly mitigated, expansion of an existing essential public facility located in the County might be more economical and environmentally sound.**

F-221 **King County should strive to site essential public facilities equitably so that no racial, cultural, or socio-economic group is unduly impacted by essential public facility siting or expansion decisions. No single community should absorb an inequitable share of these facilities and their impacts. Siting should consider environmental equity and environmental, economic, technical and service area factors. The net impact of siting new essential public facilities should be weighted against the net impact of expansion of existing essential public facilities, with appropriate buffering and mitigation. Essential public facilities that directly serve the public beyond their general vicinity shall be discouraged from locating in the Rural Area.**

F-222 **A facility shall be determined to be an essential public facility if it has one or more of the following characteristics:**

- **a. The facility meets the Growth Management Act definition of an essential public facility;**
- **b. The facility is on a state, county or local community list of essential public facilities;**
- **c. The facility serves a significant portion of the County or metropolitan region or is part of a Countywide service system; or**
- **d. The facility is the sole existing facility in the County for providing that essential public service.**

F-223 **Siting analysis for proposed new or expansions to existing essential public facilities shall consist of the following:**

- **a. An inventory of similar existing essential public facilities in King County and neighboring counties, including their locations and capacities;**
- **b. A forecast of the future needs for the essential public facility;**

c. An analysis of the potential social and economic impacts and benefits to jurisdictions receiving or surrounding the facilities;
d. An analysis of the proposal's consistency with policies F-219 through F-222;
e. An analysis of alternatives to the facility, including decentralization, conservation, demand management and other strategies;
f. An analysis of economic and environmental impacts, including mitigation, of any existing essential public facility, as well as of any new site(s) under consideration as an alternative to expansion of an existing facility;
g. Extensive public involvement; and
h. Consideration of any applicable prior review conducted by a public agency, local government, or citizen's group.

F-224 **King County supports coordination of regional water supply planning, sales of excess water supplies among municipalities in the region, water quality programs and water conservation and reuse programs.**

H. Water Supply

King County is not a water utility and does not provide potable water to citizens in the region. However, it plays an important role in the coordination or linking of water supply and growth. Moreover, the County reclaims water from its wastewater treatment plants. Reclaimed water can be used for many purposes, such as irrigation and industrial use, which currently utilize potable water sources.

Reclaimed water produced by King County must be consistent with the standards contained in the Washington Department of Ecology's "Orange Book," as promulgated under RCW 90.46. The "Orange Book" describes differing levels of treatment that are required to produce different classes of reclaimed water. King County currently produces only Class A reclaimed water, which is produced using the highest levels of treatment.

1. Potable Water Systems

Potable water is provided by Group A public water systems having 15 or more connections, Group B public water systems having 2 to 14 connections, and private wells serving one connection. The type of water system required will depend upon whether a proposed development is or is not located within the Urban Growth Area.

F-225 **In the Urban Growth Area all new construction and all new subdivisions shall be served by Group A public water systems except in the circumstance when no Group A public water system can provide service in a timely and reasonable manner per RCW 70.116.060. In that case, creation of a new Group B public water system or private water system may be allowed to serve new construction or new subdivisions. The service areas for Group A public water systems are defined by state-adopted Coordinated Water System Plans.**

F-226 **Any new Group B public water systems formed in the Urban Growth Area shall be required to connect to an existing Group A public water system when the Group A public water system can provide service in a timely and reasonable manner per RCW 70.116.060. All known and projected costs for anticipated connection to the Group A public water system shall be funded at the permitting stage of any proposed new construction or new subdivisions. The Group A public water system designated to assume the new Group B public water system should provide satellite management of the system until it can provide direct service. Rates charged for satellite**

management should be consistent with policies included in the comprehensive water system plan of the Group A public water system.

F-227 **In the Rural Area, private wells, Group B water systems, and Group A water systems are all allowed. All new construction and all new subdivisions shall be served by a Group A public water system except in the circumstance when no Group A public water system can provide service in a timely and reasonable manner per RCW 70.116.060. In that case, creation of a new Group B public water system or private water system may be allowed to serve new construction or new subdivisions. The service areas for Group A public water systems are defined by state-adopted Coordinated Water System Plans. Group A water service will be required, if either of the following criteria are met:**

- **a. The proposed development is included in an area that has been assigned to a water purveyor through a King County approved Coordinated Water System Plan and does not meet requirements for a private well or Group B system; or**
- **b. The proposed development is included in an area currently served by a Group B water system that has known quality or quantity problems that threaten public health and can best be solved by Group A service.**

2. Regional Water Supply Planning

Over the past several years King County has been working cooperatively with many of the larger water utilities in the region to gather information about regional water demand and supply. King County would like to use this information to help develop a regional water supply plan. The plan would involve and affect only public water systems and would not directly affect private wells.

F-228 **King County supports development of a regional water supply plan for the entire region. Key components of this planning process should include:**

- **a. Involvement, oversight and support of elected officials in the region;**
- **b. Meaningful public participation including the involvement of the state and federally recognized tribes;**
- **c. Prioritization of future supplies, including a role for conservation and reclaimed water;**
- **d. Assigned accountability for implementing conservation and developing new supplies and infrastructure such as transmission pipelines; and**
- **e. Legislative changes, if necessary, to implement the plan.**

F-229 **King County should assure that a regional water supply plan for all of King County is prepared in cooperation with water utilities and in coordination with affected federally recognized tribal, local and state governments. A continuous and meaningful public process should be used to develop the regional water supply plan, resulting in a plan that is adopted by elected public officials in the region and used by the state in making water resource decisions. The regional water supply plan should implement and be consistent with growth management decisions made by local and regional jurisdictions under the Growth Management Act and the approved water quality and quantity strategies adopted by the region in compliance with federal requirements under the Endangered Species Act.**

F-230 **The County will work with water utilities to develop a water supply plan that prioritizes an array of potential sources, including conservation and reclaimed water, and defines a publicly- and state-accepted strategy for how**

the region could best meet future demands for water. During development of the regional water supply plan, the County will work in concert with water utilities to evaluate the projected water demands from population growth, approved Endangered Species Act response requirements, and Clean Water Act requirements for surface water quality.

3. Utility System Interties

Water utilities obtain water supplies from many varying sources. Some water utilities receive the vast majority of their water supply from wells. Yet others receive substantial portions from municipal watersheds and reservoirs. The varying water supply sources can differ substantially in terms of dependability of output, so that while one water utility may have excess capacity, a neighboring water utility could be experiencing severe shortages and be unable to adequately serve their customers.

F-231 **King County supports interties that allow the transfer of water resources among water utilities in urban areas to meet the projected demands for growth. The transfer of water must be consistent with locally adopted growth management plans and approved Coordinated Water System Plans and implement approved Endangered Species Act response requirements and Clean Water Act requirements.**

F-232 **King County supports the development of appropriate regional water intertie capital projects, subject to approval from appropriate local, state, and federal agencies and consistent with Policy F-231.**

4. Water Reuse, Conservation and Accounting

King County reviews water utility plans for those utilities serving unincorporated King County and encourages the inclusion of elements related to water reuse and conservation in the plans.

F-233 **King County's water reuse program and projects, as well as water reuse and water supply/resources, should be coordinated with a regional water supply plan in accordance with state and federal standards and coordinated with comprehensive land use plans.**

F-234 **King County shall partner with utilities to publicize water conservation and encourage best management practices that conserve potable water supply. In exercising its role in reviewing utility water system plans, King County Utilities Technical Review Committee (UTRC) shall encourage water purveyors to include aggressive conservation and reuse measures where applicable, as well as development of new sources to support planned land uses with reliable service at minimum cost. In addition, King County shall evaluate other mechanisms, such as individual metering in a structure containing multiple water users, for their effectiveness in promoting more efficient water use.**

F-235 **In its review of water comprehensive plans, the King County Utilities Technical Review Committee shall consider the following:**

- **a. Consistency with land use plans and development regulations adopted under the Growth Management Act;**
- **b. Approved regional water resource plans, including basin plans, watershed-based conservation and recovery plans developed under ESA, and a regional water supply plan; and**
- **c. The County's Regional Wastewater Services Plan.**

F-236 **The Utilities Technical Review Committee should develop a water accounting program in conjunction with affected water utilities. The water accounting**

program should coordinate information on the rate, timing, and location of new development with the projected ability of water utilities to issue certificates of water availability.

5. Resource Management and Protection

Water system reservoirs and watersheds often serve a number of functions. These functions can include, open space, recreation, forestry, and resource management. However, each function must be weighed against the primary purpose of such reservoirs and watershed, which is to provide and protect supplies of potable drinking water.

F-237 **Public drinking water system reservoirs and their watersheds should be managed primarily for the protection of drinking water, but should allow for multiple uses, including recreation, when such uses do not jeopardize drinking water quality standards. Public watersheds must also be managed to protect downstream fish and agriculture resources.**

F-238 **Ground water-based public water supplies should be protected by preventing land uses that may adversely affect ground water quality or quantity to the extent that the supply might be jeopardized.**

I. Public Sewers and On-site Wastewater Treatment and Disposal Systems

In addition to King County's role as the regional wastewater treatment provider, the Seattle-King County Department of Public Health is the agency responsible for permitting on-site wastewater treatment and disposal systems (septic systems). In addition, King County reviews sewer utility comprehensive plans.

F-239 **In the Urban Growth Area, all new development shall be served by public sewers unless application of this policy to a proposal for a single-family residence on an individual lot would deny all reasonable use of the property, or as permitted by Policy CP-925, or to a proposal that has a vested land use application for the redevelopment or expansion of an existing use, as well as an approved septic design from the Health Department – Seattle and King County, would render approval of the land use permit void.**

F-240 **In the Urban Growth Area, King County and sewer utilities should jointly prioritize the replacement of on-site systems that serve existing development with public sewers, based on the risk of potential failure. King County and sewer utilities should analyze public funding options for such conversion and should prepare conversion plans that will enable quick and cost-effective local response to health and pollution problems that may occur when many on-site systems fail in an area.**

F-241 **The existing public sewer system in the Town of Vashon cannot be expanded to serve land beyond the boundaries of the town, except as provided in Policy F-242 and as consistent with RCW Title 57. On-site systems, community on-site systems or decentralized treatment systems may be used as appropriate for planned growth in other Rural Towns.**

F-242 **Public sewer expansions shall not occur in the Rural Area and on Natural Resource Lands except where needed to address specific health and safety problems threatening the existing uses of structures or the needs of public schools or public school facilities. Public sewers may be extended, pursuant to this policy, only if they are tightlined and only after a finding is made by King County that no reasonable alternative technologies are technologically or economically feasible. Utility providers shall ensure, through a signed agreement between the school district and the utility**

provider, that any sewer service permitted for the school district is designed only to serve public schools or public school facilities. Public sewers which are allowed in the Rural Area or on Natural Resource Lands pursuant to this policy shall not be used to convert Rural Area land or Natural Resource Lands to urban uses and densities or to expand permitted non-residential uses.

F-243 **Sewer facilities such as pump stations, force mains and trunk lines that do not provide connections to the Rural Area may be located in the Rural Area only when they are identified in a King County-approved comprehensive sewage system plan and upon a finding by King County that it is technically necessary in providing service to the Urban Growth Area.**

F-244 **On-site wastewater treatment systems in the Rural Area and Natural Resource Lands should be designed, built and operated as permanent methods of sewage disposal.**

F-245 **King County should monitor on-site systems that have shown evidence of failure or potential for failure. The data should be used to correct existing problems and prevent future problems. King County should analyze public funding options for correcting on-site wastewater system failures which may include, where feasible and otherwise consistent with this Plan, conversion to community sewage systems or installation of public sewers.**

F-246 **Collective on-site systems may be used only in the following circumstances in the Rural Area and Natural Resource Lands:**

- **a. Existing on-site systems are failing within an area and the Seattle/King County Department of Public Health concurs that long-term individual on-site system repairs are not feasible and/or water quality is threatened by the presence of or potential for health hazards resulting from inadequate on-site wastewater disposal methods;**
- **b. An authorized public agency will manage the community system; and**
- **c. The community system is designed only to serve existing structures and lots and cannot be used as a basis to increase density or to expand permitted non-residential uses. Sub-standard vacant lots must be combined to the extent feasible to meet rural density policies. Management of the community system must be by an authorized public agency.**

J. Solid Waste

Appropriate management of solid waste to protect the environment of King County is essential to public health. Responsibility for management of solid wastes generated by unincorporated area residents and businesses is shared by waste haulers certified by the Washington Utilities and Transportation Commission and the King County Solid Waste Division.

F-247 **Solid waste should be handled and disposed of in environmentally sound ways that protect the quality of air, water and public health.**

F-248 **King County shall divert as much material as possible from disposal to reduce the overall costs of solid waste management to county residents and businesses, conserve resources, protect the environment, and strengthen the county's economy.**

F-249 **Solid waste management should be planned and disposal capacity provided on a regional basis.**

F-250 **Solid waste handling facilities should be dispersed throughout the County in an equitable manner.**

K. Surface Water Management

Surface water management activities address both the quantity and quality of water entering the natural environment. Urban areas are largely covered with impervious surfaces (e.g., buildings, streets, parking lots) that cause increased runoff and are a source of pollutants. Management in the Rural Area is important, too, because of the potential adverse impacts of forestry, agricultural, and livestock practices. Prevention or mitigation of flooding, erosion, sedimentation, and water quality and habitat degradation is important for both the built and natural environments.

F-251 **To reduce flooding, erosion and sedimentation, prevent and mitigate habitat loss, enhance ground water recharge and prevent water quality degradation, the surface waters of King County shall be managed through plans, programs and regulations developed by King County in cooperation with affected jurisdictions whenever possible.**

F-252 **A watershed approach shall be taken to surface water management, with responsibility shared among King County and affected jurisdictions. This approach should emphasize prevention of water quality degradation through education programs and implementation of Best Management Practices to reduce pollution entering surface waters, including Puget Sound.**

F-253 **In the Rural Area, King County shall minimize the use of constructed facilities for surface water management and maximize the use of natural systems, provided that the ecological functions of the natural systems are not harmed. The County should provide incentives to keep these natural systems intact. Natural systems are also preferred in the Urban Growth Area, but it is recognized that structural systems will be needed to realize urban growth and density goals. King County will plan and manage surface waters on a watershed basis pursuant to Policies E-120 through E-125. To accomplish this goal, water should not be diverted from one watershed into another, nor from one drainage basin into another, unless no other reasonable alternative is available for managing surface water run-off within the same watershed and drainage basin. Where such diversions are permitted, King County will require such environmental analysis and mitigation as is needed to protect surface water resources from significant adverse impacts.**

F-254 **In the Urban Growth Area, regional and shared surface water management facilities should be encouraged to support infill development to preclude the need for individual on-site facilities, provide development incentives, encourage efficient use of land, and reduce overall facility maintenance costs. These facilities should be planned and financed through public and private partnerships.**

F-255 **Regional and shared stormwater facilities should be funded through an adequate and equitable funding mechanism. Stormwater facilities required of new development should be designed and built for low-cost, long-term maintenance.**

F-256 **King County should work cooperatively with other jurisdictions to develop and implement plans and programs that address the proper treatment and/or disposal of the wastes generated from maintenance of stormwater facilities.**

F-257 **King County should work with jurisdictions to identify and agree upon regional and local storm and surface water management responsibilities and agree on the division of storm and surface water management service provision.**

III. Energy & Telecommunications

Energy and electronic communications systems are important public services that must be coordinated with land use planning. King County's economy and quality of life depend on readily available energy and telecommunications resources. Efficient use of energy resources can minimize long-term costs to the individual and to society.

One or more local, state or federal agencies regulate retail energy providers in King County. Gas and electric utility resource and conservation plans are approved by other agencies through a public process. The Washington Utilities and Transportation Commission (UTC) reviews and accepts plans of private electric and gas utilities, and the Seattle City Council approves the plans of Seattle City Light. Electric and gas utilities operate in King County under franchises with the County for use of the public right-of-way. The UTC also defines the costs that private utilities can recover, approves rates, sets service standards and resolves customer complaints. However, unregulated firms responding to market conditions may develop many new electricity resources.

Telecommunications services are regulated by several entities, including the Federal Communications Commission and the Washington Utilities and Transportation Commission. King County has some regulatory authority over telecommunications services through franchises and the development approval process.

A. Energy

1. Consistency with Land Use Plans

State law mandates that electric and gas public service companies provide the same level of service on a uniform basis, regardless of location. (RCW 80.28.110). Policies in this chapter encourage the utilities to prioritize capital improvements in a manner consistent with land use.

Disruption of traffic due to public and private road projects frequently occurs in King County. Policies in this chapter support existing programs to notify utilities of upcoming projects to build, expand, or maintain county roads so utility and road construction can be coordinated.

Distribution systems for gas, electric and telecommunications installation in new construction now have separate permits. Permit consolidation is desirable as a means to expedite review while protecting the environment. Countywide Planning Policy ED–23 encourages jurisdictions to establish a master utility project.

F-301 **Energy providers' resource and facility plans should be consistent with the King County Comprehensive Plan and should provide for a reliable source of energy in the event of natural disaster or other potential threats of disruption to service.**

F-302 **King County should coordinate public road construction and maintenance projects with utility construction and maintenance.**

2. Conservation and Alternative Energy Sources

King County Countywide Planning Policy CO-6 states that "aggressive conservation efforts shall be implemented to address the need for adequate supply for electrical energy and water resources, protect

natural resources, and achieve improved air quality." King County has a continued commitment to energy conservation, use of renewable resources and quality enforcement of the energy code.

Solar features in building design can be cost effective in the Pacific Northwest. Solar energy is renewable, clean and reduces the use of fossil fuels. King County encourages the use of both passive and active solar energy use through subdivision and building design.

Gas and electric utilities offer low-income energy assistance programs. All feasible actions to increase the availability of conservation measures to low-income residents should be pursued, such as public-private cooperation and combining existing rehabilitation efforts with installation of energy efficiency measures.

F-303 **Efficient energy consumption, conservation, the use of renewable technologies, and energy responsible land use decisions should be a priority in King County. King County promotes the maximum use of energy conservation and renewable energy resources now, while leaving options for increasing conservation and renewable technologies in the future.**

F-304 **To implement the Countywide Planning Policy of aggressive conservation and promotion of regional air quality, King County should:**

- **a. Effectively enforce the energy code as part of the general permit process;**
- **b. Provide density incentives through the zoning code for energy-efficient developments;**
- **c. Continue to improve the fuel-efficiency and emissions of the County-owned fleet of motor vehicles;**
- **d. Work with utilities to become a model of energy efficiency in facilities owned or operated by Metropolitan King County; and**
- **e. Seek cost-effective ways to capture energy from County operations which other-wise would be lost, such as methane gas from landfills and sewage treatment.**

F-305 **King County shall continue to explore methods of reusing or marketing methane gas from its sewage treatment plants, and shall explore the feasibility of expanding these methods to the methane gas produced at its landfills.**

F-306 **King County encourages the use of solar energy and should protect solar access.**

F-307 **King County should expand the availability of energy efficiency measures to low-income residents.**

3. Electric Utilities

The four-state Northwest Conservation and Electric Power Plan of the Northwest Power Planning Council provides a blueprint for the development of electricity resources. Bonneville Power Administration and other federal agencies, the region's utilities, state and local government, private businesses and the people of the Northwest all participate in implementing the Council's goals. Electric utilities serving King County include Bonneville Power Administration, Seattle City Light, and Tanner Electric Cooperative. Puget Sound Energy provides both electricity and natural gas service.

Hydropower is the largest single source of our existing electrical power, with the county's major suppliers located outside King County. These include the Grand Coulee, North Bonneville and Ross Dams. Federal and state approvals for hydroelectric dams are difficult and time-consuming to acquire, making hydropower a small part of projected new regional power-generating resources.

Existing hydropower facilities in King County include Snoqualmie Falls, Cedar Falls, Twin Falls, Weeks Falls, and Black Creek. Proposed projects include expansion of Snoqualmie Falls and new facilities at South Fork Tolt River, Hancock Creek and Calligan Creek (both are tributaries of the North Fork Snoqualmie), the Upper South Fork Snoqualmie and Martin Creek near Stevens Pass. Few additional projects beyond these listed are expected to be built in King County.

The Federal Energy Regulatory Commission licenses such projects, but in doing so must consider existing plans and policies of public and private jurisdictions. While power generation benefits the public, care must be taken to ensure that small hydroelectric projects are constructed in an environmentally sound manner, directing new, small hydropower facilities, for example, to streams that do not have anadromous fish. Construction and operation must also be consistent with the intended functions and uses of forestlands, where most small hydroelectric projects are located.

Gas-fired combined cycle combustion turbines are expected to dominate new resource additions. These facilities typically fall below the size threshold for the Energy Facilities Site Evaluation Council's siting process. While these facilities have a relatively small physical footprint and are relatively clean, they do pose potential threats to local air and water quality.

F-308 **To address the cumulative effects of multiple energy facilities, King County should continue to participate in the licensing and relicensing processes for all existing and proposed small hydroelectric projects within King County. Individual project reviews should address consistency with designated land uses and environmental protection goals. Specifically, hydroelectric projects should:**

- **a. Not significantly interfere with commercial forestry operations;**
- **b. Be located and operated in a manner such that impacts to salmonid fish and wildlife are minimized;**
- **c. Avoid unstable and erosion-prone areas;**
- **d. Include performance bonding to fund erosion control;**
- **e. Provide full mitigation for construction and operation impacts;**
- **f. Avoid, to the extent practicable, diminishing scenic values; and**
- **g. Incorporate adequate public safety measures.**

F-309 **King County and the utilities should identify and preserve corridors to accommodate future electric power transmission and distribution lines. Corridor designation should include:**

- **a. Identification of appropriate shared uses and recognition of the values provided by non-utility uses, such as recreation;**
- **b. Recognition of County roads as utility corridors; and**
- **c. Evaluation of proposed facility plans on a system-wide basis, rather than project-by-project.**

F-310 **When new, expanded or upgraded transmission is required, use of existing corridors that have above-ground utilities should be evaluated first. King County should facilitate appropriate corridor sharing among different utility types and owners.**

F-311 **New electrical distribution lines should be installed underground where reasonably feasible and not a health or safety concern. The County should encourage underground placement of existing distribution lines through such tools as local improvement districts.**

Public concern exists over the potential health effects of electrical power lines. The concern focuses on the effects of extremely low level electromagnetic fields, called ELF/EMF or simply EMF. Seattle-King County

Department of Public Health currently responds to inquiries from citizens about EMF and keeps abreast of current research. The following policy recognizes the inconclusive nature of the data concerning EMF and the need to have an informed citizenry through public disclosure of available research about the potential health risks. Scientific evidence to-date does not support firm conclusions about the existence of adverse health effects related to EMF.

F-312 **King County will monitor scientific research on potential human health effects of extremely low frequency electric and magnetic fields (EMF). If federal or state agencies promulgate rules to reduce exposure to EMF—through changes in the use of appliances, construction practices, the location of electrical infrastructure or other activities—the County shall inform its citizens and take appropriate actions.**

4. Natural Gas

The most thermally efficient use of natural gas is in "direct applications." For example, to heat homes and businesses, the use of natural gas can reduce the demand for additional electricity. The choice of fuel shall be based on market conditions, with the customer comparing various fuels. Many homes and businesses in King County do not have the choice of natural gas, however, even within the Urban Growth Area.

Other factors that currently limit natural gas availability include state utility regulations, building and plumbing codes, and rebate programs that favor electric heat. Because of these barriers, most multifamily housing is built with electric heat, a significant consideration given that they represent a large share of projected new housing units in urban King County.

F-313 **King County should work to remove barriers to the availability and efficient use of natural gas.**

5. Hazardous Liquid and Gas Transmission Pipelines

Hazardous liquid and gas transmission pipelines, as defined by RCW 81.88.040 and WAC 480-93-005, consecutively, provide a vital service of transporting hazardous materials from one location to another. Long distance transmission pipelines move a variety of hazardous materials, including crude oil, petroleum products, natural gas and hazardous liquids, such as anhydrous ammonia. Pipeline rupture or failure can result in release of these materials, which are highly flammable, explosive or toxic. The policies in this chapter identify public values and goals to assure that the transmission of hazardous materials by pipeline address public health and safety.

The Federal Energy Regulatory Commission (FERC) regulates the location, construction and operational conditions of interstate natural gas pipelines through its certification process. The state and federal government regulate the location, construction and operational conditions of hazardous liquid and intrastate gas pipelines through the Energy Facility Site Evaluation Council (EFSEC). In its review of pipeline applications, however, EFSEC must determine whether the pipelines are consistent with County land use plans and zoning codes. Thus, King County's authority to regulate the location of pipelines is through the comprehensive plan and development regulations.

F-314 **King County recognizes that federal and state regulatory programs govern the design, construction, and operation of hazardous liquid and gas transmission pipelines. To preserve the safety and reliability of the hazardous liquid and gas transmission pipeline system, land use, zoning and regulations shall be consistent with state and federal requirements.**

F-315 **Any new hazardous liquid and gas transmission pipelines proposed for construction in King County shall meet the County's development regulations, including but not limited to, King County's zoning code, building code, grading code, and shoreline management code.**

King County anticipates that few new hazardous liquid or gas transmission pipelines will be constructed in the near future. However, as existing pipelines age and the relationship between resources, refineries and markets changes over time, new pipelines will need to be constructed. Hazardous liquid and gas transmission pipelines are best constructed away from locations where large numbers of people assemble. King County recognizes however, that under some circumstances, new gas transmission pipelines may need to locate in densely populated areas as the only practical alternative to meet the demand for service.

F-316 **New hazardous liquid and gas transmission pipelines should be located away from high density residential zones, Urban Activity and Business Centers, Office Parks, sports fields, schools and day care centers or other land uses where large numbers of people would assemble.**

F-317 **When new, expanded or upgraded hazardous liquid or gas transmission pipelines are required, use of existing corridors should be evaluated first. King County should facilitate appropriate corridor sharing among different utility types and owners.**

F-318 **Hazardous liquid and gas transmission pipelines should not be located in areas susceptible to soil disturbance or liquifaction or in aquifer recharge areas. When it is impractical to avoid such areas, special engineering precautions should be taken to protect public health, safety and welfare.**

It is essential to map the location of existing hazardous liquid and gas transmission pipelines within King County so that developers know where they are and whom to call for information before construction begins. Accurate maps will assist King County in reviewing land use applications for land uses located near pipelines.

F-319 **King County should map the location of existing and new hazardous liquid and gas transmission pipelines. Maps shall not substitute the one-call locating system and shall not be used for any construction or maintenance activity.**

Risks to life and property can be minimized by keeping land uses a safe distance from hazardous liquid and gas transmission pipelines. Pipelines transport a variety of materials, some of which flow under the force of gravity. While standard setbacks do not assure protection from materials that have the ability to migrate, setbacks may protect life and property from hazardous materials that are highly flammable, explosive or toxic. Limiting the allowable uses within pipeline rights-of-way can further reduce risks to life and property.

F-320 **Structures designed for human occupancy shall not be located within hazardous liquid or gas transmission pipeline rights-of-way and should be set back from the pipeline to protect public health, safety and property. No structures shall be located over the pipeline.**

F-321 **Land uses shall be restricted within hazardous liquid and gas transmission pipeline rights-of-way. Passive recreational uses, such as hiking trails, may be allowed if the risk to life and property is assessed and determined to be minimal.**

Pipeline failure can result from damage caused by excavation near existing pipelines. Many existing pipelines initially were constructed in less-populated areas with little development. As demand for land grows, the risk of conflict between existing pipelines and land development increases.

F-322 **King County should promote the safety and reliability of the hazardous liquid and natural gas transmission pipeline systems by requiring developers, contractors, and excavators to notify the state, pipeline operators and utilities through the one-number locator service, before beginning excavation or construction.**

F-323 **In the interest of safety and reliability of the hazardous liquid and natural gas interstate transmission pipeline systems, the county should take steps to protect and preserve the signs that mark pipelines.**

6. Natural Gas Distribution Systems

Natural gas pipelines fall into two major categories: gas transmission lines that transport natural gas from production fields to local distribution companies and distribution systems that deliver natural gas from transmission pipelines to retail customers. The federal government may define certain parts of the natural gas distribution system that serve large volume gas users as part of the transmission system. Distribution systems for transporting natural gas are fundamentally different from transmission gas pipelines and should be regulated based on their design, use and location.

Gas distribution systems are owned and operated by local distribution utilities. Such systems consist of the pipelines that deliver natural gas to end users together with intermediate supply lines. The distribution system is constructed incrementally, with addition of new segments and upgrading of existing lines in numerous small projects. The distribution system is a network that is primarily located in road rights-of-way, where service is available. Local distribution companies are subject to the comprehensive safety regulations administered by the Washington Utilities and Transportation Commission (WUTC) under state law and regulations and by the federal Office of Pipeline Safety under federal law and regulations. The rates and services of investor-owned utilities also are subject to comprehensive regulation by the WUTC under state law and regulations.

F-324 **King County recognizes that the gas distribution system is primarily located in road rights-of-way.**

F-325 **King County should promote the safety and reliability of the natural gas distribution pipeline systems by requiring developers, contractors, and excavators to notify the state, pipeline operators and utilities through the one-number locator service, before beginning excavation or construction.**

F-326 **In the interest of safety and reliability of the natural gas distribution pipeline systems, the county should take steps to protect and preserve the signs that mark pipelines.**

F-327 **Structures designed for human occupancy shall not be located within gas distribution pipeline rights-of-way and should be set back from the pipeline to protect public health, safety and property. No structures shall be located over the pipeline.**

F-328 **Permit requirements shall require excavators to ensure adequate protection of any facilities that are encountered during their work. This shall include but not be limited to adhering to the foreign facility owners requirements for separation and backfill, developing joint plans when drilling or boring parallel to foreign facilities, and potholing all facilities that will be crossed by drilling or boring.**

B. Telecommunications

1. Telecommunications

Telecommunication technologies are changing rapidly and will continue to change during the horizon of this plan. The future telecommunication system may make little distinction between cable, telephone and cellular. Telecommunication services include voice, data, video and other communication services on various mediums including, but not limited to, wire, fiber optic or radio wave. Effective telecommunications services are critical to citizens in several ways. They promote and enhance individual information exchange, contribute to a robust regional economy, and afford numerous public services, including delivery of emergency services, education and opportunities for citizen involvement.

F-329 **King County complies with the Telecommunications Act of 1996 and provides the widespread availability of telecommunication systems to facilitate communication between and among members of the public, public institutions and business in both the urban and rural areas.**

F-330 **Telecommunication services are to be encouraged as a means to mitigate the transportation impact of development and growth.**

F-331 **Long-term planning for telecommunications construction, reconstruction and facility upgrades should include provisions to insure that the system's capacity, design and equipment will allow users to take advantage of innovative uses, services and technology.**

F-332 **Telecommunication companies and the County should coordinate activities when facilities are being installed or road construction projects are scheduled.**

F-333 **Long-term planning for telecommunications systems should allow uninterrupted service during natural disasters.**

F-334 **Co-location of telecommunication facilities is encouraged to reduce the unnecessary proliferation of individual, single-user towers. Co-location shall be required unless an applicant can demonstrate to the satisfaction of the county that co-location on an existing tower is not feasible and not consistent with service quality and access.**

F-335 **Although visual impacts are always an important consideration in the decision to approve or deny a proposal, King County shall give greater weight to the visual impacts of telecommunication facilities proposed to be located on residentially-zoned lands or in the Rural Area. In addition, the visual impacts of proposals for an individual tower with a single user shall be given greater weight than proposals to co-locate facilities.**

F-336 **King County considers the placement of telecommunication facilities within street rights-of-way as the preferred alternative to the construction of facilities on private property. Regulatory standards shall require placement in street rights-of-way, especially within residential neighborhoods and Rural areas, unless such a location is not feasible or not consistent with service quality and access.**

2. Cable Services

King County Ordinance No. 10159 dictates current policy for cable services. It states in part:

> " it is the County's policy to promote the widespread availability of cable service and diverse information to County residents and to encourage the development of cable systems and cable technology as a means of communication between and among members of the public and public institutions."

The County's cable-related needs are expressed in the following policies:

F-337 **Long-term planning for cable systems should include service to all areas of the County which meet the minimum density established in the cable company's franchise agreement and the County's Cable Television Ordinance.**

F-338 **Cable companies should provide services that meet the cable-related needs and interests of all segments of the community, taking into account the cost of meeting such needs and interests.**

F-339 **Cable companies should take affirmative steps to ensure that reasonable services are available regardless of income or the income of other people in the person's neighborhood.**

F-340 **The goal of long-term cable planning should be a high-capacity, state-of-the-art system. Two-way capacity should be installed and activated. Cable systems should be interconnected to other communications systems. They should be designed to be "open;" that is, the systems should be usable by many, for a variety of purposes.**

F-341 **Public uses of the cable system should be expanded as the system is upgraded.**

3. Internet Access

Rapidly changing technologies are providing opportunities for alternative work environments and lifestyles as more people transmit and receive information through the internet. While there is a growing interest in the use of computer technologies, few new developments are including high-speed internet access lines or home cabling. King County encourages private partnering between developers, builders and communication providers to expand the opportunities for access to the internet.

F-342 **Developers should collaborate with major employers to create developments that facilitate and encourage telecommuting by installing high-speed internet lines during construction of the project.**

F-343 **Builders and architects should work with the telecommunication industry to design state-of-the art cable-ready homes and offices.**